

What is claimed is:

1. A cholesteric liquid crystal (CLC) color filter layer, comprising:

a light-absorption layer on a substrate; and

red, green and blue CLC color filters on the light-absorption layer, the red, green and blue CLC color filters reflecting light components of red, green and blue wavelengths, respectively; and

wherein the red CLC color filter includes an additional blue CLC color filter therein.

2. The CLC color filter of claim 1, further comprising a green CLC color filter that includes the additional blue CLC color filter therein.

3. A cholesteric liquid crystal (CLC) color filter layer, comprising:

a light-absorption layer on a substrate; and

red, green and blue CLC color filters on the light-absorption layer, the red, green and blue CLC color filters reflecting light components of red, green and blue wavelengths, respectively; and

wherein the green CLC color filter includes an additional blue CLC color filter therein.

4. A cholesteric liquid crystal (CLC) color filter layer, comprising:

a light-absorption layer on a substrate; and

red, green and blue CLC color filters on the light-absorption layer, the red, green and blue CLC color filters reflecting light components of red, green and blue wavelengths, respectively; and

wherein the blue CLC color filter includes an additional red CLC color filter therein.

5. A cholesteric liquid crystal (CLC) color filter layer, comprising:
a light-absorption layer on a substrate; and
red, green and blue CLC color filters on the light-absorption layer, the red, green and blue CLC color filters reflecting light components of red, green and blue wavelengths, respectively; and
wherein the blue CLC color filter includes an additional green CLC color filter therein.

6. A method of forming a cholesteric liquid crystal (CLC) color filter layer, comprising:
forming a light-absorption layer on a substrate;
forming a cholesteric liquid crystal layer on the light-absorption layer; and
forming red, green and blue CLC color filters by applying ultraviolet light to the CLC layer, respectively;
wherein the red, green and blue CLC color filters reflect light components of red, green and blue wavelengths, respectively; and
wherein forming the blue CLC color filter includes forming an additional blue CLC color filter in the red CLC color filter.

8. The method of claim 6, wherein the additional blue CLC color filter is in periphery of the red CLC color filter.

9. The method of claim 6, wherein forming the blue CLC color filter further comprises forming the additional blue CLC color filter in the green CLC color filter.

9
10. The method of claim 9, wherein the additional blue CLC color filter is in periphery of the green CLC color filter.

10
11. The method of claim 6, wherein the size of the additional blue CLC color filter is adjustable in the red CLC color filter.

12. The method of claim 11, wherein the size of the additional blue CLC color filter is adjustable in the red CLC color filter.